

The background is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a 3D appearance. They are located in the top-left, top-center, bottom-left, and bottom-right areas of the slide.

AERMOD IMPLEMENTATION WORKGROUP UPDATE

ERIK SNYDER (R6) & JAMES THURMAN (OAQPS)

2014 REGIONAL/STATE/LOCAL MODELERS WORKSHOP

SALT LAKE CITY, UT

AIWG STATUS...SO FAR

1. STARTED SPRING 2011 WITH FOCUS ON SINGLE SOURCE MODELING OF NO₂ AND SO₂ FACILITIES OF MOST INTEREST TO STATES
 2. INITIAL REPORT OUT AT 2011 RSL WORKSHOP IN ATLANTA
 3. POST-WORKSHOP QA OF RESULTS AND DEVELOPMENT OF CUMULATIVE SCENARIOS IN FALL 2011
 4. ADDITIONAL REPORT OUT AT 10TH MODELING CONFERENCE IN MARCH 2012 AND 2012 RSL WORKSHOP
 5. SINGLE SOURCE MODELING DRAFT SUMMARY AND RESULTS AVAILABLE ON SCRAM
 - CONTAINS FULL SET OF CHARTS/MAPS FOR EACH MODELED SOURCE
- [HTTP://WWW.EPA.GOV/TTN/SCRAM/10THMODCONF/REVIEW_MATERIAL/AIWG_SUMMARY_V2.PDF](http://www.epa.gov/ttn/scram/10thmodconf/review_material/aiwg_summary_v2.pdf)

WORKGROUPS

- INITIALLY FORMED FALL 2013
- BASED ON MEMBER FEEDBACK FORMED SIX WORKGROUPS
 - BACKGROUND CONCENTRATIONS
 - NO₂ ISSUES
 - MODELING DOMAIN
 - INTERMITTENT EMISSIONS
 - METEOROLOGICAL INPUTS
 - BUILDING DOWNWASH

BACKGROUND CONCENTRATIONS

- **CLEVE HOLLADAY (R9), LELAND VILLALVAZO (SJV)**, LISA ALAM (NE), JILLIAN BAKER (SOUTH COAST), DENNIS BECKER (MN), CLINT BOWMAN (WA), DAWN FRONING (MO), JENNIFER KRZAK (IA), KELLY ROBSON (MO), JOHN ROTH (WI), JIM SULLIVAN (MN), JOSEPH WILLS (OK)
- OVERLAPS WITH OTHER COMMITTEES
 - ESPECIALLY MODELING AND INTERMITTENT EMISSIONS WG
- APPLYING APPENDIX W
 - NO MONITORS, ISOLATED, MULTIPLE, ONSITE
- SOURCES IMPACTING A MONITOR
- MODELING IN LIEU OF MONITORING
- MODEL REQUIREMENTS
- CLARIFYING AND ENHANCING PROCEDURES FOR DETERMINING BACKGROUND

NO₂ ISSUES

- CHRIS OWEN (OAQPS), ERIC PETERS (NM), DORIS JUNG (CO), TIM LEON-GUERRERO (R3), GLENN REED (SJV), JOHN ROTH (WI)
- REVIEW EXISTING AND POTENTIAL NO2 EVALUATION FIELD DATABASES
- DETERMINE METRICS FOR MODEL/MONITOR INTERCOMPARISONS
- PERFORM MODEL/MONITOR INTERCOMPARISONS
- CONDUCT SENSITIVITY TESTS WITH EVALUATION DATABASES
- MAKE RECOMMENDATION TO EPA REGARDING KEY INPUTS TO TIER 2 & 3 METHODS
- ADDITIONAL REVIEW OF ARM2

MODELING DOMAIN

- **MARGARET VALIS (NY), LELAND VILLALVAZO (SJV)**, JILLIAN BAKER (SOUTH COAST), DENNIS BECKER (MN), ANNAMARIA COULTER (R2), DAWN FRONING (MO), REBECCA MATICHUK (R8), GREG QUINA (SC), KELLY ROBSON (MO)
- GOALS
 - PROVIDE RECOMMENDATIONS FOR THE AERMOD IMPLEMENTATION GUIDE
 - IDENTIFY WHICH SOURCES SHOULD BE INCLUDED IN A CUMULATIVE ANALYSIS
 - DEFINE “SIGNIFICANT CONCENTRATION GRADIENT”
 - DETERMINE ACCEPTABLE RECEPTOR SPACING
- TASKS
 - REVIEW EXISTING GUIDANCE AND METHODS FOR LIMITING SOURCES IN CUMULATIVE ANALYSES
 - SUMMARIZE EXISTING MODEL DOMAIN AND RECEPTOR SPACING GUIDANCE
 - COORDINATE WITH THE BACKGROUND CONCENTRATION WG
 - CASE STUDIES

INTERMITTENT EMISSIONS

- **HAIDAR AL-RAWI (TN), KEVIN SCHILLING (ID)**, JILLIAN BAKER (SOUTH COAST), CLINT BOWMAN (WA), ANNAMARIA COULTER (R2), GREG QUINA (SC), GLENN REED (SJV), JOHN ROTH (WI), STEVE SHERMAN (IN)
- WILL NOT PROVIDE A SINGLE SET OF DEFINITIVE GUIDANCE OR DESCRIPTIVE METHODS
- GOAL IS TO PROVIDE A COLLECTION OF THE FOLLOWING:
 - REGULATORY INTERPRETATIONS OF GUIDANCE AND POLICY ON WHEN TO MODEL INTERMITTENT EMISSIONS
 - METHODS THAT HAVE BEEN USED OR CAN BE USED TO MODEL INTERMITTENT EMISSIONS
 - SPECIFIC EXAMPLES OF ANALYSES THAT DEMONSTRATE WHEN INTERMITTENT EMISSIONS CAN OR CANNOT MAKE AN IMPORTANT CONTRIBUTION TO DESIGN VALUE IMPACTS

METEOROLOGICAL INPUTS

- JAMES THURMAN (OAQPS), LELAND VILLALVAZO (SJV), LISA ALAM (NE), DORIS JUNG (CO), MIKE KISS (VA), BOBBY LUTE (VA), MARK NEYMAN (IN), GLENN REED (SJV), MELISSA SHEFFER (MN)
- EVALUATE LOW WIND SPEED OPTIONS AND U^* ADJUSTMENTS IN AERMET/AERMOD
- EVALUATE OPTIONS FOR UPPER AIR SOUNDING SELECTION IN AERMET
- MMIF EVALUATIONS TO INFORM GUIDANCE DEVELOPMENT

BUILDING DOWNWASH

- **LEIGH BACON (AL), JOHN ROTH (WI)**, DAWN FRONING (MO), JIM HAYWOOD (MI), MATHEW HOLLINGER (IN), JENNIFER KRZAK (IA), REBECCA MATICHUK (R8), KELLY ROBSON (MO)
- TECHNICAL EFFORT – ATTEMPTING TO CONNECT WITH USEPA\OAQPS TO ASSIST DEVELOPMENT OF NEW DOWNWASH TECHNIQUES
- PRACTICAL EFFORT – DEVELOPING DOCUMENT FOR STANDARDIZATION OF INPUT TO BPIP-PRIME
 - COULD BE LISTING OF KNOWN SENSITIVITIES OR SOMETHING MORE PRESCRIPTIVE
- NATIONWIDE REQUEST FOR PROBLEMS AND SENSITIVITIES WITH BPIP-PRIME
 - john.roth@wisconsin.gov

CONTINUING WORK

- MONTHLY CALLS WITH STATUS UPDATES
- SUB-GROUPS HAVE PERIODIC CALLS
- FINAL PRODUCTS
 - SUPPLEMENT OR CHANGES TO AERMOD IMPLEMENTATION GUIDE?
 - SEPARATE GUIDANCE DOCUMENTS?



THANKS TO ALL OF THE AIWG MEMBERS FOR THEIR WORK AND TIME!

- QUESTIONS?
 - CONTACTS
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